

REMARKS

The Office Action August 7, 2003, has been carefully reviewed in light of the Examiner's helpful comments and suggestions.

As a result of the Office Action, claims 22, 37, and 38 are objected to for containing minor typographical errors, all of which have been addressed by the above amendments in a manner suggested by the Examiner.

Claims 21, 22, 28, 33-35, and 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Moreover, claims 18, 20, 23-27, 30, 32, 34-36, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Kieninger '771. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kieninger '771 in view of Kieninger '763. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieninger '771. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieninger '771 in view of U.S. 5,934,842 to Gupta. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kieninger '771 in view of U.S. 4,929,131 to Allemann. However, claims 21, 22, 37 and 38 are indicated to be allowable if rewritten in independent form, for which, Applicants wish to thank the Examiner for such indication of allowable subject matter. In connection with the rejected claims, Applicants respectfully submit that the prior art references do not teach or suggest the claimed invention in any manner and provide the following remarks in favor of the patentability of those rejected claims.

By the above amendments, Applicants have addressed all the Section 112, second paragraph, rejection issues. With respect to claim 21, Applicants respectfully submit that antecedent basis for the "the basic body" is provided in claim 18, upon which claim 21 depends from.

Kieninger '771, as best seen FIG. 9, teaches a two-piece clamping device. The two pieces are drawn together by screw 51. The screw 51 is not a differential screw and is provided for tightening the two clamping parts. If the screw 51 breaks, all the parts become separated (see also col. 5, lines 52-62). Moreover, the cutting insert 4, 6 is attached to a cylindrical support member 36 using screw 43. The cylindrical support member 36 does not have a recess, and again, if the screw 43 breaks, the parts fall apart.

Moreover, as the Examiner is aware, the present invention is a single-part structure used in combination with a positive-fit disposal, whereas the prior art structure includes a plurality of parts secured to one another using screws. The milling head of the present invention uses a positive fit and an inclination which prevent the outside movement of the parts. This is a very important safety feature since the milling head rotates at high speeds. Therefore, for the reasons stated hereinabove, claim 18, and dependent claims 23 and 24, and believed to be allowable over the prior art.

Now, with respect to claim 25, as best seen FIG. 4 of Kieninger, reference numeral 46 defines an indentation and not an inclination. The essential disclosure here is that bore 48 receives the set screw 49. The set screw 49 is not a clamping element as such, which also can be seen from the diameter proportions in relation to proper clamping screws as screw 43.

With respect to claim 26, which requires an inclination of 10°, Applicants respectfully

submit that the angle which the Examiner is referring to in FIG. 4 is distinctly greater than 10°.

With respect to claim 27, neither references teaches or suggests an inclination, as best seen from FIGS. 4 and 9. FIG. 4 shows that the adjustment is made against the force of the spring stack 45. The portion contacting the insert is the only engagement point of the screw, but not inclination.

With respect to claim 28, the angle is smaller in order to prevent vibrations. The cutting insert is pressed rearward against the basic body when the screw is tightened. The stronger the centrifugal force is, the stronger a torsion force acting on the cutting insert becomes and the stronger the cutting insert is pressed against the basic body. This has nothing to do with inserting.

With respect to claim 30, screw 51 of the Keininger is not a differential screw.

With respect to claim 39, screws 56, 24, and 25 are normal screws with a pointed tip. These are conventional type screws. Clearly these screws are not conical screws.

With respect to claim 39, Applicants respectfully submit that the milling head of the Kieninger '763 has a clamping element that is a combination of a clamping pin and a threaded pin, i.e., a screw. As best understood, the bore for the screw is the only receiving part. This structure rather affects fixing the cutting insert and possibly is exposed to the torsional stresses and thus has the tendency for the cutting insert to vibrate. However, the milling head of the claimed invention provides a clamping wedge as a clamping element which is received in a positive fitting manner. This results in a clamping which allows a firm positioning of the cutting element. Accordingly, the operational safety at high speed

operations is increased. The prior art does not teach or show a clamping wedge but rather a combination of a clamping pin with a threaded screw for securing the parts.

With respect to claims 31 and 33, Gupta discloses a monobloc hub structure and not a turning plate as required by the claimed limitation.

The prior art references made of record by the Examiner have each been considered but are not believed to obviate against the allowability of the claims as amended. It is noted that none of these references have been specifically applied by the Examiner against any of the original claims.

Each issue raised in the Office Action dated August 7, 2003, has been addressed and it is believed that claims 18 - 40 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is earnestly solicited.

Respectfully submitted,
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